MEETING THE PRESBYOPIA CHALLENGE IN THE DIGITAL AGE

How patients are responding to Bausch + Lomb Ultra for Presbyopia lenses

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Digital devices — and the thousands of apps available for them — have become integral parts of our lives, and their use is not limited to a particular place, time, age group, or occupation. Whereas, computers were once tied to the workplace and the workday, today, thanks to mobile digital technology, we can engage in work and leisure activities 24/7.

Our reliance on digital technology has dramatically changed the way we use our eyes. Most people in their 40s and 50s spend more than 5 hours a day using digital devices, and more than 60% of them experience one or more symptoms of digital eye strain,¹ which is just one of the vision-related challenges for presbyopic patients.

About Digital Eye Strain

The factors that contribute to digital eye strain fall into two main categories: the individual’s visual ability (i.e., uncorrected refractive error, binocular vision disorders, accommodative disorders, and ocular surface or tear film abnormalities) and environmental factors (i.e., lighting conditions in the workplace, display position, display characteristics, and image quality).² These factors result in symptoms of eye strain, blurred vision, dryness, and musculoskeletal symptoms, such as neck, shoulder and back pain.¹

Ergonomic considerations are important for people with presbyopia who use digital devices, because spectacle lens designs for this population are often associated with eyestrain and musculoskeletal symptoms. Bifocal spectacles are typically designed to provide clear near vision in down gaze which may not be adequate, particularly for people who use desktop computers.² Multifocal contact lenses may provide an ergonomic benefit for these patients.

Physical Ocular Changes in Presbyopia

While people with presbyopia are experiencing visual and ergonomic symptoms of digital eye strain, they also are experiencing physical ocular changes. Age-related changes in the lacrimal gland results in decreased tear production, and the length of the meibomian glands decrease gradually with age, which may affect the ocular surface and the tear film, including tear film breakup time.³
Figure 1

Tasks for Which Multifocal Contact Lenses are Perceived as Superior to Eyeglasses
(top five reasons cited among current wearers)
• are better for physically active people
• make people look younger
• are better for daytime activities
• are more comfortable to wear
• allow people to grow older gracefully.

To compound this situation, increased concentration associated with visual tasks performed on digital devices results in a reduction of blink rates, on average, from 15 to 5 blinks per minute,\(^4\)\(^6\) while the number of incomplete blinks and tear film breakup times increase.\(^7\)\(^\text{-}^{12}\) For contact lens wearers, particularly those with presbyopia, these factors may lead to increased lens dehydration and symptoms of dryness and blurred vision.

Satisfying Preferences
While presbyopic patients face visual, ergonomic, and physical ocular challenges, their expectations for vision correction remain high. Patients who currently wear multifocal contact lenses say they are superior to eyeglasses because they are better for active lifestyles and make people look younger, among other reasons (Figure 1).

When weighing their satisfaction with their multifocal contact lenses, patients cite sharp, clear vision at near and mid-range distances, and ease of transition between near and far distances as top priorities (Figure 2).\(^{13}\) These drivers of satisfaction are understandable, given today’s lifestyle demands, not the least of which is our use of digital technology.

Bausch + Lomb introduced the Bausch + Lomb Ultra for Presbyopia multifocal contact lens in 2016. This lens combines the moisture retention benefits of the sam-ficon A silicone hydrogel material with the clear near, intermediate, and distance vision benefits of the unique 3-Zone Progressive Design.

As members of a group of practitioners across the United States conducting patient evaluations of this product, we would like to share some of our own experiences with the lens and our patients’ reactions to this innovative technology.

Initial Reactions
One of the first comments we hear at both the dispensing and follow-up visits — particularly from current multifocal lens wearers — is how comfortable the Bausch + Lomb Ultra for Presbyopia lenses are. Patients also report their vision is clear, particularly when they are working on computers or looking at their smartphones or tablets. We have found that the intermediate computer distance is important for people from all walks of life, whether they are teachers, students, Internet technology specialists, retirees, or stay-at-home parents. People who spend hours on their computers and digital devices appreciate the benefits of MoistureSeal Technology. People who have high near-point demands relative to their distance vision during the workday often take the time to comment how much they appreciate the visual performance of these lenses.

Patients also comment on the crispness and clarity of their distance vision with the Bausch + Lomb Ultra for Presbyopia lenses. They say driving at night seems clear when they are wearing them, and they also notice the smooth transition from distance to near vision.

Success One Case at a Time
While studies, surveys, and polls provide important big-picture data, clinical experience can be powerful in changing the mindset of patients and practitioners alike. We have had numerous successes with the Bausch + Lomb Ultra for Presbyopia lens, underscoring its utility in everyday practice.

A recent example at Dr. Geffen’s practice involved a new patient who had never required vision correction until presbyopia developed in her 40s.

A low hyperope, the patient had been using over-the-counter reading glasses at her computer and “hated” them. When asked if she had ever considered contact lenses, she said her previous eye doctor had never mentioned them as an option for her.

After being fitted with Bausch + Lomb Ultra for Presbyopia lenses, the patient first remarked that her distance vision was clear. Then, when she looked at her cell phone, she said, “This is incredible! I can read everything!” As the lenses fit well and were comfortable, the patient decided to try them for a week.

At her 1-week follow-up visit, the patient was thrilled with her freedom from eyeglasses. She says these lenses are so comfortable, she has to remember to remove them at the end of the day.

Patients like this woman represent untapped potential in many practices. In the past, we know that some practitioners have tended to avoid fitting emmetropes in multifocal contact lenses. With today’s advanced materials and designs, however, we are routinely fitting emmetropes and low hyperopes in multifocal contact lenses in our practices, primarily Bausch + Lomb Ultra for Presbyopia lenses.

Offering contact lenses to all patients who need vision correction — even emmetropes with presbyopia — is a routine practice in our offices; however, we have found that, in some cases, even patients who declined this option previously may change their minds. Here, Dr. Gaddie shares a good example.
A 48-year-old man had been wearing spectacles with progressive addition lenses for 2 years. During his annual comprehensive examination, he mentioned he was interested in trying multifocal contact lenses because of his active sports lifestyle.

After learning about all of his options, the patient decided on a monthly modality and was fitted with the Bausch + Lomb Ultra for Presbyopia — +0.25D High Add OD and +0.50D High Add OS, per the fitting guide. The patient mentioned some blur at near, so the correction for the nondominant left eye was adjusted to a +0.75D High Add lens, which resulted in well-balanced distance and near vision.

This case underscores the value of following the fitting guide to achieve quick success and ease of fit. It also exemplifies a satisfying doctor-patient relationship, in which the patient’s evolving vision and lifestyle needs were met with the latest technology, first with progressive addition spectacle lenses and then with innovative multifocal contact lenses.

**Ease the Transition to Presbyopia**

Although our practices are located in distinctly different regions of the country — Louisville, Ky., and San Diego — our approaches to delivering eye care are similar. We strive to employ cutting-edge technology in every aspect of practice, from diagnostic equipment to contact lenses, and we encourage our staff members to adopt this forward-thinking attitude. Patients arrive for their appointments already anticipating hearing about innovations in eye care, and they are excited to test-drive the latest contact lens technology.

This is particularly relevant as patients approach the age of presbyopia. We recommend that practitioners begin educating their patients about this natural aging process — what to expect and how we can address these changes — before they start experiencing symptoms, if possible, and continue the conversation throughout the various stages of presbyopia. Knowing that we have exceptional multifocal contact lenses designed for patients’ everyday needs will ease their transition into presbyopia.

**Conclusion**

In an era overwhelmingly defined by our use of computers and handheld and wearable digital technology for work and leisure pursuits, people who require vision correction, particularly presbyopes, may be struggling to see clearly and comfortably at all distances. When given an opportunity to try contact lenses designed to deliver sharp vision at each distance, we have found that current lens wearers and eyeglass wearers alike give Bausch + Lomb Ultra for Presbyopia high marks.

**References**